
Revised Acute Care Bed Need Projections

Tables 5A and 5B

Supersedes Table 5A published in the Proposed 2008 SMFP

Corrected Table 5A: Acute Care Bed Need Projections

(2006 Utilization Data from "Solucient" as compiled by the Cecil G. Sheps Center for Health Services Research)

Projection based on Growth Factor at 0.47% per year for the next 6 years. Target Occupancy Factors: ADC less than 100 = 150%; ADC of 100-200 = 140%; and ADC greater than 200 = 133%.

A	B	C	D	E	F	G	H	I	J	K
Lic. #	Facility Name	County	Licensed AC Beds	Adjustments for CONs & Prev. Need	"Solucient" 2006 Acute Care Days	6 Years Growth at 0.47% annually	2012 Projected Average Daily Census (ADC)	2012 Beds Adjusted for Target Occ.	Projected 2012 Deficit ("-" = Surplus)	2012 Need Determination
H0272	Alamance Regional Medical Center, Inc.	Alamance	182	0	40,888	42,055	115	161	-21	0
H0274	Frye Reg. Med. Ctr.-Alexander Campus	Alexander	25	0	0	0	0	0	-25	0
H0108	Alleghany Memorial Hospital	Alleghany	41	0	2,602	2,676	7	11	-30	0
H0082	Anson Community Hospital	Anson	52	0	5,962	6,132	17	25	-27	0
H0099	Ashe Memorial Hospital, Inc.	Ashe	76	0	5,507	5,664	16	23	-53	0
H0037	Charles A. Cannon, Jr. Memorial Hospital, Inc.	Avery	40	0	6,505	6,691	18	27	-13	0
H0002	Pungo District Hospital Corporation	Beaufort	39	0	2,289	2,354	6	10	-29	0
H0188	Beaufort County Hospital	Beaufort	120	0	11,416	11,742	32	48	-72	0
Totals for Beaufort County:										
H0268	Bertie Memorial Hospital	Bertie	6	0	1,470	1,512	4	6	0	0
H0154	Bladen County Hospital	Bladen	48	0	4,534	4,663	13	19	-29	0
H0250	Brunswick Community Hospital	Brunswick	60	14	12,197	12,545	34	52	-22	0
H0150	J. Arthur Doshier Memorial Hospital	Brunswick	36	0	4,577	4,708	13	19	-17	0
Totals for Brunswick County:										
H0036	Mission Hospitals, Inc.	Buncombe	673	0	176,440	181,474	497	661	-12	0
H0062	Grace Hospital, Inc.	Burke	182	-20	20,897	21,493	59	88	-74	0
H0091	Valdese General Hospital, Inc.	Burke	131	0	12,439	12,794	35	53	-78	0
Totals for Burke County:										
H0031	NorthEast Medical Center	Cabarrus	447	0	92,686	95,331	261	347	-100	0
H0061	Caldwell Memorial Hospital, Inc.	Caldwell	110	0	15,986	16,442	45	68	-42	0
H0222	Carteret General Hospital	Carteret	135	0	26,046	26,789	73	110	-25	0
H0053	Frye Regional Medical Center	Catawba	209	0	49,159	50,562	139	194	-15	0
H0223	Catawba Valley Medical Center	Catawba	200	0	35,928	36,953	101	142	-58	0
Totals for Catawba County:										
H0007	Chatham Hospital, Inc.	Chatham	68	-43	2,638	2,713	7	11	-14	0
H0239	Murphy Medical Center, Inc.	Cherokee	57	0	8,400	8,640	24	36	-21	0
H0063	Chowan Hospital	Chowan	49	0	6,968	7,167	20	29	-20	0
H0113	Kings Mountain Hospital	Cleveland	72	0	9,145	9,406	26	39	-33	0
H0236	Crawley Memorial Hospital, Inc.	Cleveland	60	0	21	22	0	0	-60	0
H0024	Cleveland Regional Medical Center	Cleveland	241	0	44,056	45,313	124	174	-67	0
Totals for Cleveland County:										
			373	0						0

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Projection based on Growth Factor at 0.47% per year for the next 6 years. Target Occupancy Factors: ADC less than 100 = 150%; ADC of 100-200 = 140%; and ADC greater than 200 = 133%.

A	B	C	D	E	F	G	H	I	J	K
Lic. #	Facility Name	County	Licensed AC Beds	Adjustments for CONs & Prev. Need	"Solucient" 2006 Acute Care Days	6 Years Growth at 0.47% annually	2012 Projected Average Daily Census (ADC)	2012 Beds Adjusted for Target Occ.	Projected 2012 Deficit ("-" = Surplus)	2012 Need Determination
H0045	Columbus County Hospital, Inc.	Columbus	154	0	24,905	25,616	70	105	-49	0
H0201	Craven Regional Medical Center	Craven	270	37	75,750	77,911	213	284	-23	0
H0213	Cape Fear Valley Medical Center	Cumberland	397	134	134,128	137,955	378	503	-28	0
H0273	The Outer Banks Hospital, Inc.	Dare	19	2	3,862	3,972	11	16	-5	0
H0027	Lexington Memorial Hospital	Davidson	94	0	13,188	13,564	37	56	-38	0
H0112	Thomasville Medical Center	Davidson	123	0	13,907	14,304	39	59	-64	0
	Totals for Davidson County:		217	0						0
H0171	Davie County Hospital	Davie	81	0	1,486	1,528	4	6	-75	0
H0166	Duplin General Hospital, Inc.	Duplin	61	0	9,776	10,055	28	41	-20	0
H0233	Durham Regional Hospital	Durham	316	0	62,567	64,352	176	247	-69	0
H0015	Duke University Hospital	Durham	924	0	236,215	242,955	666	885	-39	0
	Totals for Durham Regional and Duke:		1240	0					-108	0
H0075	North Carolina Specialty Hospital, LLC	Durham	18	0	3,163	3,253	9	13	-5	0
	Totals for Durham County:		1258	0						0
H0258	Heritage Hospital	Edgecombe	101	0	14,036	14,436	40	59	-42	0
H0209	Forsyth Medical Center	Forsyth	637	114	204,918	210,765	577	768	17	0
H0229	Medical Park Hospital, Inc.	Forsyth	136	-114	5,608	5,768	16	24	2	0
	Totals for Forsyth and Medical Park:		773	0					19	0
H0011	North Carolina Baptist Hospitals	Forsyth	738	51	204,620	210,459	577	767	-22	0
N/A	Remainder of 2006 SMFP Need Determination	Forsyth		39	0	0	0	0	0	0
N/A	2007 SMFP Need Determination	Forsyth		26	0	0	0	0	0	0
	Totals for Forsyth County:		1511	116						0
H0261	Franklin Regional Medical Center	Franklin	70	0	13,335	13,715	38	56	-14	0
H0105	Gaston Memorial Hospital	Gaston	372	0	92,548	95,189	261	347	-25	0
H0098	Granville Medical Center	Granville	62	0	7,072	7,274	20	30	-32	0
H0052	High Point Regional Health System	Guilford	291	0	69,036	71,006	195	272	-19	0
H0159	Moses Cone Health System	Guilford	818	-59	194,847	200,407	549	730	-29	0
N/A	2007 SMFP Need Determination	Guilford		34						0
	Totals for Guilford County:		1109	-25						0
H0004	Our Community Hospital, Inc.	Halifax	20	0	189	194	1	1	-19	0
H0230	Halifax Regional Medical Center, Inc.	Halifax	186	0	31,797	32,704	90	134	-52	0
	Totals for Halifax County:		206	0						0

Supersedes Table 5A published in the Proposed 2008 SMFP

Corrected Table 5A: Acute Care Bed Need Projections

(2006 Utilization Data from "Solucient" as compiled by the Cecil G. Sheps Center for Health Services Research)

Projection based on Growth Factor at 0.47% per year for the next 6 years. Target Occupancy Factors: ADC less than 100 = 150%, ADC of 100-200 = 140%, and ADC greater than 200 = 133%.

A	B	C	D	E	F	G	H	I	J	K
Lic. #	Facility Name	County	Licensed AC Beds	Adjustments for CONs & Prev. Need	"Solucient" 2006 Acute Care Days	6 Years Growth at 0.47% annually	2012 Projected Average Daily Census (ADC)	2012 Beds Adjusted for Target Occ.	Projected 2012 Deficit ("-" = Surplus)	2012 Need Determination
H0224	Betsy Johnson Regional Hospital	Harnett	101	0	27,957	28,755	79	118	17	
N/A	Harnett Health System Central Campus	Harnett	0	50	0	0	0	0	0	
	Totals for Betsy Johnson and Harnett Health Syst.		101	50					17	
H0080	Good Hope Hospital, Inc. (closed effective 4/11/06)	Harnett	0	34	705	725	2	3	-31	
	Totals for Harnett County:		101	84						0
H0025	Haywood Regional Medical Center	Haywood	170	0	19,998	20,569	56	85	-85	0
H0019	Park Ridge Hospital	Henderson	62	0	14,288	14,696	40	60	-2	
H0161	Margaret R. Pardee Memorial Hospital	Henderson	201	0	27,504	28,289	78	116	-85	0
	Totals for Henderson County:		263	11						
H0001	Roanoke-Chowan Hospital	Hertford	86	0	15,940	16,395	45	67	-19	0
H0259	Lake Norman Regional Medical Center	Iredell	105	18	28,474	29,286	80	120	-3	
H0248	Davis Regional Medical Center	Iredell	120	-18	17,519	18,019	49	74	-28	
	Totals for Lake Norman and Davis Regional:		225	0					-31	0
H0164	Iredell Memorial Hospital, Incorporated	Iredell	199	0	42,880	44,104	121	169	-30	0
	Totals for Iredell County:		424	0						
H0087	Harris Regional Hospital, Inc.	Jackson	86	0	17,774	18,281	50	75	-11	0
H0151	Johnston Memorial Hospital	Johnston	155	24	38,110	39,197	107	150	-29	0
H0243	Central Carolina Hospital	Lee	127	0	19,468	20,023	55	82	-45	0
H0043	Lenoir Memorial Hospital, Inc.	Lenoir	218	0	45,366	46,660	128	179	-39	0
H0225	Carolinas Medical Center - Lincoln	Lincoln	101	0	14,065	14,466	40	59	-42	0
H0193	Highlands-Cashiers Hospital, Inc.	Macon	24	0	1,074	1,105	3	5	-19	
H0034	Angel Medical Center, Inc.	Macon	59	0	4,754	4,890	13	20	-39	
	Totals for Macon County:		83	0						0
H0078	Martin General Hospital	Martin	49	0	7,685	7,904	22	32	-17	0
H0097	The McDowell Hospital	McDowell	65	0	7,389	7,600	21	31	-34	0
H0071	Carolinas Medical Center / Ctr. for MH	Mecklenburg	795	0	227,068	233,547	640	851	56	
H0042	Carolinas Medical Center - Mercy & Pineville	Mecklenburg	294	0	54,807	56,371	154	216	-78	
H0255	Carolinas Medical Center - University	Mecklenburg	130	0	20,570	21,157	58	87	-43	
	Totals for CMC, CMC Mer Pine & CMC Univ.:		1219	0					-65	
H0010	Presbyterian Hospital	Mecklenburg	463	76	149,608	153,877	422	561	22	
H0282	Presbyterian Hospital Huntersville	Mecklenburg	50	0	13,808	14,202	39	58	8	
H0270	Presbyterian Hospital Matthews	Mecklenburg	102	0	25,644	26,376	72	108	6	
H0251	Presbyterian Orthopaedic Hospital	Mecklenburg	140	-76	13,001	13,372	37	55	-9	
	Totals for Presbyterian, Huntersville, Matthews & Ortho.:		755	0					27	
	Totals for Mecklenburg County:		1974	0						27

Supersedes Table 5A published in the Proposed 2008 SMFP

Corrected Table 5A: Acute Care Bed Need Projections

(2006 Utilization Data from "Solucient" as compiled by the Cecil G. Sheps Center for Health Services Research)

Projection based on Growth Factor at 0.47% per year for the next 6 years. Target Occupancy Factors: ADC less than 100 = 150%; ADC of 100-200 = 140%; and ADC greater than 200 = 133%.

A	B	C	D	E	F	G	H	I	J	K
Lic. #	Facility Name	County	Licensed AC Beds	Adjustments for CONs & Prev. Need	"Solucient" 2006 Acute Care Days	6 Years Growth at 0.47% annually	2012 Projected Average Daily Census (ADC)	2012 Beds Adjusted for Target Occ.	Projected 2012 Deficit ("-" = Surplus)	2012 Need Determination
H0169	Spruce Pine Community Hospital	Mitchell	85	-39	6,158	6,334	17	26	-20	0
H0003	FirstHealth Montgomery Memorial Hospital	Montgomery	37	0	1,989	2,046	6	8	-28	0
H0100	FirstHealth Moore Reg. Hosp. & Pinehurst Treat.	Moore	297	23	74,037	76,150	209	277	-43	0
H0228	Nash General Hospital	Nash	270	0	58,039	59,695	164	229	-41	0
H0221	New Hanover Regional Medical Center	New Hanover	647	0	152,173	156,515	429	570	-77	0
H0048	Onslow Memorial Hospital	Onslow	162	0	33,454	34,409	94	141	-21	0
H0157	University of North Carolina Hospitals	Orange	602	91	176,345	181,377	497	661	-32	0
H0054	Albemarle Hospital	Pasquotank	182	0	32,548	33,477	92	138	-44	0
H0115	Pender Memorial Hospital, Inc.	Pender	43	0	4,279	4,401	12	18	-25	0
H0066	Person Memorial Hospital	Person	50	0	8,731	8,980	25	37	-13	0
H0104	Pitt County Memorial Hospital	Pitt	628	106	189,924	195,343	535	712	-22	0
H0079	St. Luke's Hospital	Polk	45	0	3,352	3,448	9	14	-31	0
H0013	Randolph Hospital, Inc.	Randolph	145	0	23,577	24,250	66	100	-45	0
H0265	Sandhills Regional Medical Center	Richmond	54	0	13,559	13,946	38	57	3	0
H0158	FirstHealth Richmond Memorial Hospital	Richmond	99	0	14,150	14,554	40	60	-39	0
N/A	2007 SMFP Need Determination	Richmond		6						
	Totals for Richmond County:		153	6						0
H0064	Southeastern Regional Medical Center	Robeson	292	0	62,340	64,119	176	246	-46	0
H0072	Morehead Memorial Hospital	Rockingham	108	0	22,897	23,550	65	97	-11	0
H0023	Annie Penn Hospital	Rockingham	110	0	17,778	18,285	50	75	-35	0
	Totals for Rockingham County:		218	0						0
H0040	Rowan Regional Medical Center	Rowan	223	0	36,768	37,817	104	145	-78	0
H0039	Rutherford Hospital, Inc.	Rutherford	129	0	17,895	18,406	50	76	-53	0
H0067	Sampson Regional Medical Center	Sampson	116	0	19,921	20,489	56	84	-32	0
H0107	Scotland Memorial Hospital	Scotland	97	21	25,732	26,466	73	109	-9	0
H0008	Stanly Regional Medical Center	Stanly	97	0	16,932	17,415	48	72	-26	0
H0165	Stokes-Reynolds Memorial Hospital, Inc.	Stokes	53	0	1,649	1,696	5	7	-46	0
H0049	Hugh Chatham Memorial Hospital, Inc.	Surry	81	0	14,800	15,222	42	63	-18	0
H0184	Northern Hospital of Surry County	Surry	100	0	17,144	17,633	48	72	-28	0
	Totals for Surry County:		181	0						0
H0069	Swain County Hospital	Swain	48	0	1,874	1,927	5	8	-40	0
H0111	Transylvania Community Hospital and Bridgeway	Transylvania	44	-2	6,113	6,287	17	26	-16	0
H0050	Carolinas Medical Center - Union	Union	157	0	33,398	34,351	94	141	-16	0
H0267	Maria Parham Hospital	Vance	91	0	21,651	22,269	61	92	1	0

Corrected Table 5A: Acute Care Bed Need Projections

(2006 Utilization Data from "Solucient" as compiled by the Cecil G. Sheps Center for Health Services Research)

Projection based on Growth Factor at 0.47% per year for the next 6 years. Target Occupancy Factors: ADC less than 100 = 150%; ADC of 100-200 = 140%; and ADC greater than 200 = 133%.

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Lic. #	Facility Name	County	Licensed AC Beds	Adjustments for CONs & Prev. Need	"Solucient" 2006 Acute Care Days	6 Years Growth at 0.47% annually	2012 Projected Average Daily Census (ADC)	2012 Beds Adjusted for Target Occ.	Projected 2012 Deficit ("-" = Surplus)	2012 Need Determination
H0199	WakeMed Raleigh Campus	Wake	515	60	166,249	170,993	468	623	48	
H0276	WakeMed Cary Hospital (Now Lic. Separately)	Wake	114	42	35,260	36,266	99	149	-7	
	Totals for WakeMed Raleigh & WakeMed Cary	Wake	629	102					41	
H0065	Rex Hospital	Wake	388	45	100,098	102,954	282	375	-58	
H0238	Duke Health Raleigh Hospital	Wake	186	0	22,268	22,903	63	94	-92	
	Totals for Wake County:		1203	147						41
H0006	Washington County Hospital, Inc.	Washington	49	0	2,458	2,528	7	10	-39	0
H0077	Watauga Medical Center, Inc.	Watauga	117	0	23,519	24,190	66	99	-18	
H0160	Blowing Rock Hospital	Watauga	28	0	774	796	2	3	-25	
	Totals for Watauga County:		145	0						0
H0257	Wayne Memorial Hospital, Inc.	Wayne	255	0	59,606	61,307	168	235	-20	0
H0153	Wilkes Regional Medical Center	Wilkes	120	0	21,502	22,116	61	91	-29	0
H0210	Wilson Medical Center	Wilson	294	0	35,131	36,133	99	148	-146	0
H0155	Hoots Memorial Hospital, Inc.	Yadkin	22	0	679	698	2	3	-19	0

Revised as of 7.19.07

Supersedes Table 5B published in the Proposed 2008 SMFP

Corrected Table 5B: Acute Care Bed Need Determinations

(Proposed for Certificate of Need Review Commencing in 2008)

It is determined that the counties listed in the table below need additional Acute Care Beds as specified:

Service Area	Acute Care Bed Need Determination *	Certificate of Need Application Due Date **	Certificate of Need Beginning Review Date
Mecklenburg County	27	To Be Determined	To Be Determined
Wake County	41	To Be Determined	To Be Determined
It is determined that there is no need for additional Acute Care Beds anywhere else in the State and no other reviews are scheduled.			

* Need Determinations shown in this document may be increased or decreased during the year pursuant to Policy GEN-2 (see Chapter 4).

** Application Due Dates are absolute deadlines. The filing deadline is 5:30 p.m. on the Application Due Date. The filing deadline is absolute (see Chapter 3).

**Acute Care Bed Petition Materials
Related to Cape Fear Valley Health System
Petition:**

- Agency Report
 - Cape Fear Valley Health System-Petition and
Related Comments
-

AGENCY REPORT

Acute Care Beds Petition: Cape Fear Valley Health System

Petitioner

Cape Fear Valley Health System
1638 Owen Drive
Fayetteville, North Carolina 28304

Request

The Petition requests an adjusted need determination in the 2008 State Medical Facilities Plan for 20 additional acute care beds in Cumberland County.

Background Information

The standard methodology which projects need for acute care beds is based on the total number of acute inpatient days of care provided by each hospital, as obtained from the Thomson database by the Cecil G. Sheps Center for Health Services Research. The number of days of care is advanced by six years based on a growth rate representing the average annual historical percentage change for the State over the past four years (i.e., three intervals of change). The projected midnight average daily census for the target year is then "adjusted" by target occupancy factors (which increase as the Average Daily Census increases). "Surpluses" or "Deficits" are determined by comparing the projected bed need to the current inventory of licensed plus pending acute care beds.

In deference to the standard methodology, Chapter 2 of the Plan allows persons to petition for an adjusted need determination in consideration of "...unique or special attributes of a particular geographic area or institution..." if they believe their needs are not appropriately addressed by the standard methodology.

Analysis/Implications

The Petitioner provides documentation of the impact that the 2005 Base Realignment And Closure (BRAC) will have on Cumberland County. As a result of BRAC, Cumberland County is expected to grow by approximately 23,000 people in the next four years. The Petitioner outlines on the next page how many additional acute care beds are expected to be needed in 2012 to accommodate the BRAC population.

Table 2: BRAC Related Incremental Acute Care Bed Need

BRAC Related Incremental Acute Care Bed Need			
	Military Dependents	Civilians, Civilian Dependents, and Indirect	Total
Total Projected to Reside in Cumberland County in 2011	5,956	13,638	19,594
Cumberland County Population Growth Factor for 2011 - 2012	0.62%	0.62%	
Total Projected to Reside in Cumberland County in 2012	5,993	13,723	19,715
Patient day Use-Rate for Cumberland County	494	494	
Projected Census $(((\text{Population}/1000) \times \text{Use-Rate}) / 365)$	8	19	27
Projected Bed Need at 75 Percent Occupancy (1.33 Target Occupancy Factor > 200 Beds)	11	25	34
Estimated out-migration (includes Womack)	50%	40%	
Cumberland County Bed Need	5	15	20

Sources: Cumberland County projected population statistics (used to calculate growth rate) - North Carolina State Demographics Website. Patient days for Cumberland County (used to calculate use-rate) - Solucient. Target occupancy factor, SMFP.

First, military personnel were excluded from the analysis since they are primarily served by Womack Army Medical Center ("Womack") at Fort Bragg. Then, to be consistent with the bed need projections in the proposed SMFP, the projected 2011 BRAC population of military dependents, civilians, civilian dependents and indirect population was adjusted for the overall population growth projected by the North Carolina State Data Center to occur in Cumberland County between 2011 and 2012.

The estimated inpatient census resulting from the BRAC population was calculated using the 2012 BRAC population (without military personnel) and the Cumberland County patient day use-rate. The Cumberland County patient day use-rate was calculated by dividing total 2006 Solucient patient days for Cumberland County by the 2006 county population estimate from the North Carolina State Data Center. The bed need was calculated by multiplying the census by the target occupancy factor of 1.33 for hospitals with over 200 beds, per the acute care need determination methodology.

Finally, in order to be conservative, the total projected bed need was reduced due to anticipated out-migration from Cumberland County. Out-migration includes the population served by Womack. For military dependents, 50 percent of the patients are expected to out-migrate since this population will have some access to Womack. Forty percent of the civilians, civilian dependents and indirect population are assumed to out-migrate. The out-migration is assumed to be significantly higher than the 15 percent out-migration experienced for overall Cumberland County residents, since military dependents and retired military are more likely to access other military treatment facilities and Veteran Affairs hospitals. As noted in Table 2, the BRAC population is expected to require 20 beds in Cumberland County.

The Agency accepts the Petitioner's conclusion that accommodating the BRAC population in Cumberland County will require 20 additional beds by 2012. However, according to the *corrected Proposed 2008 State Medical Facilities Plan, by the standard methodology, Cumberland County is projected to have a surplus of 28 acute care beds in 2012. Therefore, subtracting the 20 beds needed to accommodate the BRAC population from Cape Fear Valley Health System's projected **surplus** of 28 beds reduces the surplus to eight beds.

*the Acute Care Growth Factor published in the Proposed 2008 SMFP was corrected to .47%

The Petitioner acknowledges that the standard methodology results in a surplus of acute care beds for Cumberland County in 2012. However, the Petitioner submits that using Cumberland County 2003, 2004, 2005, and 2006 acute care patient days to calculate the Growth Factor results in a bed need for Cumberland County. The Agency supports the standard methodology for projecting need for acute care beds and does not recommend adjusting the Growth Factor for Cumberland County.

Agency Recommendation

In consideration of the projected surplus of 28 beds in Cumberland County by the standard methodology, the Agency recommends that the Petitioner's request for an adjusted need determination for 20 additional acute care beds be denied.

Raleigh PH
8-1-07
Acute Care

**Petition for Adjustment to Need Determination
for Acute Care Beds in Cumberland County**

DFS Health Planning
RECEIVED

AUG 01 2007

Medical Facilities
Planning Section

August 1, 2007

PETITION FOR ADJUSTMENT TO NEED DETERMINATION FOR ACUTE CARE BEDS
FOR CUMBERLAND COUNTY

Petitioner:

Cape Fear Valley Health System
1638 Owen Drive
Fayetteville, North Carolina 28304

Joyce P. Korzen
Interim President and Chief Executive Officer
jkorzen@capefearvalley.com
910-609-4000

DFS Health Planning
RECEIVED

AUG 01 2007

Medical Facilities
Planning Section

I. Requested Change

Cumberland County Hospital System, Inc. d/b/a Cape Fear Valley Medical Center ("CFVMC" or the "Petitioner") is petitioning for an adjustment to need determination for the proposed 2008 State Medical Facilities Plan ("SMFP"). CFVMC is requesting that the acute care bed need for 2012 for Cumberland County, proposed in Chapter 5 of the draft SMFP, be adjusted from 0 to 20 beds to support the unique population surge that is anticipated with the 2005 Base Realignment And Closure ('BRAC'), which became law on November 8, 2005. The realignment is required by law to occur by 2011 and is unrelated to current military deployments and offenses in the Middle East.

As described in more detail below, in addition to its normal growth, Cumberland County population is expected to grow by almost 23,000 people in the next four years as a result of BRAC. The SMFP acute care methodology, on the other hand, projects bed need based on current hospital utilization projected forward six years using the average statewide growth of patient days during the last four fiscal years. Since the growth rate is based on historical utilization, the acute care bed need methodology in the SMFP does not accommodate unusual population growth. In fact, the acute care plan methodology does not directly use population in

the need assessment. Consequently, this methodology will not address the unique circumstances faced in Cumberland County.

The Petitioner is not requesting a modification to the methodology for bed need determination in the SMFP. Rather, this request is for an adjustment to need for the BRAC population growth. This Petition is premised on the very type of “unique or special attributes of a particular geographic area...”¹ contemplated by the State Health Coordinating Council (“SHCC”) when it considers resource allocations outside of the standard methodology in the SMFP. CFVMC respectfully requests that the SHCC considers Cumberland County’s unique situation and grants this request.

II. Reasons for Proposed Adjustment

The BRAC

Cumberland County is the site of the largest military installation in the world. Fort Bragg is adjacent to the city of Fayetteville and brings 175,000 employees and dependents and an economic impact of nearly \$4 billion annually to the community. Cumberland County is a metropolitan area with an estimated population of over 308,000 residents in 2007.

Cumberland County and the surrounding population is expected to grow abruptly and substantially due to BRAC. With the base realignment at Fort Bragg and Pope Air Force Bases, base military and civilian personnel and their families are expected to grow by over 18,000 people by 2011 (see “Population Impact of the BRAC” section below for specific projections). When the indirect impact of population relocating to support the base personnel and their families is considered, the estimated total population impact of the base personnel changes will

¹ See Proposed 2008 SMFP, p. 9 which defines the appropriate circumstances for Petitions for Adjustment to Need.

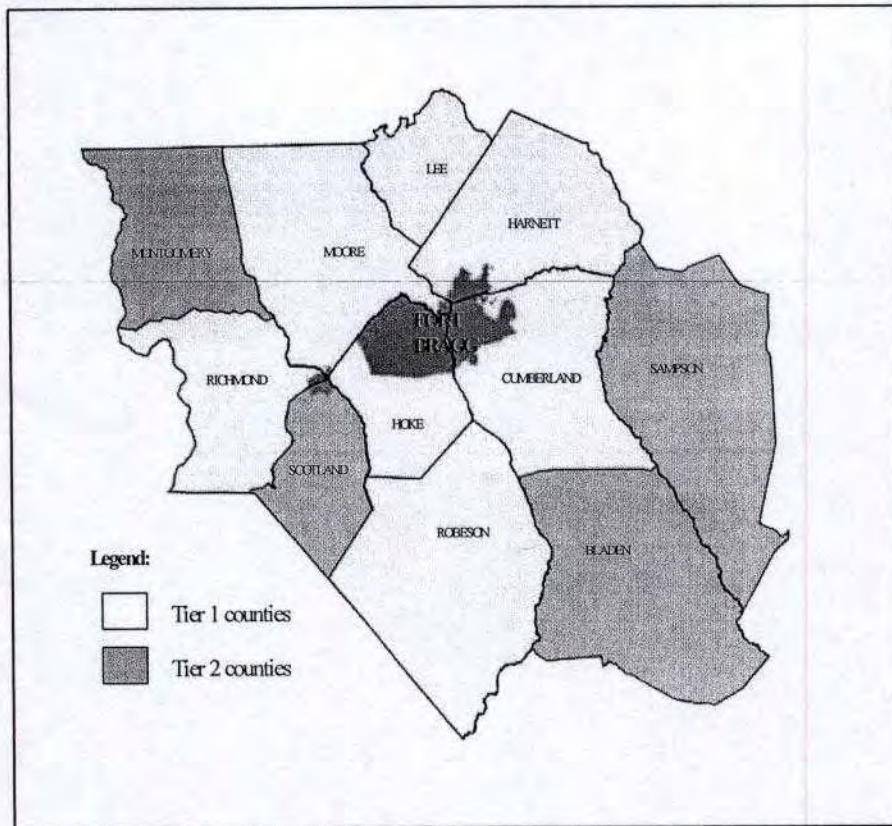
grow to more than **36,000** residents during the same time period. The majority of this growth is expected to occur in Cumberland County.

The realignment includes the relocation of two large headquarters to Fort Bragg: 1) Forces Command (FORSCOM), a four-star headquarters, and 2) the U.S. Army Reserve Command. These high command changes are also expected to result in the relocation of military contractors which are not accounted for in the **36,000** population impact noted above. Military contractors are almost exclusively retired military, an older population that consumes more healthcare services and will tend to remain in the community - a population quite different from the younger and more transient base troops.

The BRAC impact is anticipated to be so significant that 11 area counties came together last year to form the BRAC Regional Task Force. The Task Force has received over \$6 million in grants which it is using to develop a growth management plan, train dislocated workers and assist in transforming the workforce in the area. The plan will address 11 specific need areas, including local and regional health care needs. The BRAC has defined two levels of counties which will be impacted by the BRAC. Tier 1 counties (highlighted on the map below), of which Cumberland is a part, are defined as counties that will suffer significant adverse consequence from the impact of BRAC actions and other growth at Ft. Bragg. Tier 2 counties (noted also on the map below) will be included for planning purposes, but are anticipated to absorb less of the population change.

Although the geographic area impacted by BRAC will span multiple counties, the scope of this petition is limited to Cumberland County. The map below shows Cumberland and the surrounding counties as well as the location of Ft. Bragg.

Figure 1: Map of Cumberland and the Surrounding Counties



Source: BRAC RTF website.

Population Impact of the BRAC

The projected population impact of the BRAC is shown in the table below. The Center for Urban and Regional Studies at the University of North Carolina at Chapel Hill (the “Center”) issued a Preliminary Community Impact Assessment on May 17, 2007. The study estimated the *direct* population increases for military and civilian personnel to be **6,366** and when their families are included to **18,169** by 2011. When a conservative multiplier of 1.0 (the Center suggested a multiplier between 1.0 and 2.0) is applied to allow for *indirect* population increases for such factors as increased jobs that provide services to the new personnel, the impact by 2011 totals **36,338**. The population impact in Cumberland County, as noted in the table below, is projected to be **22,902**.

The total population of Cumberland County, excluding the impact of the BRAC, is currently projected to grow to 314,202 by 2011 (a 1.9 percent increase from the July 2007 estimate of 308,255). Consequently, the BRAC will represent a 7.3 percent *additional* increase in the population over the four-year period.

Table 1: Estimated Change in Population from 2006 to 2011 Due to BRAC

County	Estimated Change In Population from 2006 to 2011 Due to BRAC							Total Change Less Military Personnel
	Military Personnel	Civilian Base Personnel	Estimated Military Family Members	Estimated Civilian Family Members	Total Personnel & Family Members	Indirect Population Multiplier (1.0)	Total	
Bladen	4	29	7	57	97	97	194	190
Cumberland (off base)	3,308	729	5,956	1,458	11,451	11,451	22,902	19,594
Harnett	527	217	949	434	2,127	2,127	4,253	3,726
Hoke	435	110	783	220	1,548	1,548	3,096	2,661
Lee	44	89	79	178	390	390	780	736
Montgomery	3	24	5	46	78	78	157	154
Moore	140	212	252	423	1,027	1,027	2,054	1,914
Richmond	156	47	281	95	579	579	1,158	1,002
Robeson	10	162	18	325	515	515	1,030	1,020
Sampson	7	55	13	110	185	185	369	362
Scotland	10	48	18	96	172	172	344	334
Total	4,644	1,722	8,361	3,442	18,169	18,169	36,338	31,694

Source: Estimated change in military personnel, civilian base personnel, military dependents, and civilian family members developed by the Center for Urban and Regional Studies at the University of North Carolina at Chapel Hill. Additionally, the Center suggested an additional multiplier of 1.0 to 2.0 to account for the indirect population impact for increased jobs that provide services to new personnel.

Moreover, estimates of the Fort Bragg population growth continue to increase, particularly when government contractors are included. As noted in the July 27, 2007 newspaper article attached, Fort Bragg currently estimates that the base will grow by about 12,000 soldiers, contractors and government employees alone (numbers exclude family members and indirect population growth). While CFVMC did not incorporate these higher estimates in its assessment of bed need, the fact, as noted in the article, that Congress is set to provide \$37 million in funding for the relocation of troops and others indicates that the growth is real and imminent.

Impact on Demand for Health Care Services

The impact of the BRAC on acute care bed need in Cumberland County is estimated to be approximately 20 additional beds. The method for determining the need is noted in Table 2 and the narrative below.

Table 2: BRAC Related Incremental Acute Care Bed Need

BRAC Related Incremental Acute Care Bed Need			
	Military Dependents	Civilians, Civilian Dependents, and Indirect	Total
Total Projected to Reside in Cumberland County in 2011	5,956	13,638	19,594
Cumberland County Population Growth Factor for 2011 - 2012	0.62%	0.62%	
Total Projected to Reside in Cumberland County in 2012	5,993	13,723	19,715
Patient day Use-Rate for Cumberland County	494	494	
Projected Census $(((\text{Population}/1000) \times \text{Use-Rate}) / 365)$	8	19	27
Projected Bed Need at 75 Percent Occupancy (1.33 Target Occupancy Factor > 200 Beds)	11	25	34
Estimated out-migration (includes Womack)	50%	40%	
Cumberland County Bed Need	5	15	20

Sources: Cumberland County projected population statistics (used to calculate growth rate) - North Carolina State Demographics Website. Patient days for Cumberland County (used to calculate use-rate) - Solucient. Target occupancy factor, SMFP.

First, military personnel were excluded from the analysis since they are primarily served by Womack Army Medical Center (“Womack”) at Fort Bragg. Then, to be consistent with the bed need projections in the proposed SMFP, the projected 2011 BRAC population of military dependents, civilians, civilian dependents and indirect population was adjusted for the overall population growth projected by the North Carolina State Data Center to occur in Cumberland County between 2011 and 2012.

The estimated inpatient census resulting from the BRAC population was calculated using the 2012 BRAC population (without military personnel) and the Cumberland County patient day use-rate. The Cumberland County patient day use-rate was calculated by dividing total 2006 Solucient patient days for Cumberland County by the 2006 county population estimate from the North Carolina State Data Center. The bed need was calculated by multiplying the census by the target occupancy factor of 1.33 for hospitals with over 200 beds, per the acute care need determination methodology.

Finally, in order to be conservative, the total projected bed need was reduced due to anticipated out-migration from Cumberland County. Out-migration includes the population served by Womack. For military dependents, 50 percent of the patients are expected to out-

migrate since this population will have some access to Womack. Forty percent of the civilians, civilian dependents and indirect population are assumed to out-migrate. The out-migration is assumed to be significantly higher than the 15 percent out-migration experienced for overall Cumberland County residents, since military dependents and retired military are more likely to access other military treatment facilities and Veteran Affairs hospitals. As noted in Table 2, the BRAC population is expected to require 20 beds in Cumberland County.

Occupancy of Current Providers

The service area, Cumberland County, has one acute care hospital, CFVMC, which currently operates at capacity.² CFVMC is struggling to keep up with current patient demand for healthcare services. The hospital's Emergency Department continues to be back-logged with patients waiting for beds and CFVMC is currently seeking a temporary increase in beds. The hospital has 397 licensed beds, with approval to construct and convert an additional 112 beds, for a total of 509 licensed beds.³ Table 3 below summarizes the history of Cape Fear's Utilization over the last several years.

Table 3: Cape Fear Valley Medical Center Historical Utilization

Cape Fear Valley Medical Center Historical Utilization					
	Years Ended September 30,				Annualized
	2003	2004	2005	2006	Year-to-Date June 30, 2007
Licensed Beds	383	394	407	394	397
Admissions	23,250	23,617	25,734	26,475	27,045
Patient Days	115,870	124,246	130,664	134,742	139,655
ALOS	4.98	5.3	5.1	5.1	5.2
ADC	317	340	358	369	383
Percent Occ	82.9%	86.4%	88.0%	93.7%	96.4%
ER Visits	70,649	82,910	93,316	94,343	99,559

Sources: Hospital License Renewal Applications and CFVMC records.

² Highsmith-Rainey Hospital is an LTCH located in Cumberland County, which will have 66 beds in 2011.

Use-rates used in calculating the patient census impact of the BRAC population do not include LTCH patients.

³ The 2007 SMFP includes a 22-bed need allocation for Cumberland County, for which CFVMC plans to apply. If approved, CFVMC will have 531 acute care beds.

As noted in Table 3 above, current occupancy levels are significantly higher than the target occupancy rates for hospitals with greater than 200 beds (75.2 percent) in the SMFP. Further, even with an additional 134 beds (under construction and in the 2007 SMFP), the current census alone results in over a 72 percent occupancy rate. Of course, pent-up demand and normal population growth is expected to result in much higher occupancy rates.

Additionally, Womack, Fort Bragg's on-base hospital, is not expected to serve significant inpatient needs of the BRAC population over and above the out-migration contemplated in the estimate in Table 2 above. Currently, Womack operates a 165-bed facility which serves TriCare beneficiaries. As stated by Womack's Commander in the attached letter, the hospital is already running at capacity and has had to limit the number of TriCare patients served, even without the BRAC. The U.S. Army does not plan to expand the hospital to accommodate the BRAC troop growth. The Commander further states that Womack fully supports the efforts of civilian health care systems to accommodate the BRAC.

It is important to note that approximately 20,000 Fort Bragg troops are currently deployed. When these troops return, the demand for health care services at Womack as well as other area hospitals will be further increased.

Cumberland County Acute Care Bed Need Determination in Proposed SMFP

As demonstrated above, the BRAC population will clearly require additional bed capacity in Cumberland County. This need may appear to be inconsistent with the 18-bed surplus for Cumberland County in the proposed SMFP. However, this surplus results from the use of a statewide growth factor (the average growth rate of state wide patient days over the last four years) projected forward by six years (to 2012) . The proposed SMFP uses a statewide growth

factor of 0.82 percent, about half of the growth factor in the 2007 plan (1.58 percent). This resulted in substantially lower 2012 patient days for Cumberland County. Conversely, patient days have grown in Cumberland County at a significantly higher rate than the statewide growth rate. Table 4 shows the bed need calculation using the prescribed methodology in the SMFP if patient days of Cumberland County facilities are used to calculate the growth rate. The result is a bed need rather than a surplus for 2012.

Table 4: Cumberland County Projected Acute Care Bed Need (excluding BRAC impact)

Cumberland County Projected Acute Care Bed Need (excluding BRAC impact)			
	Inpatient Acute Care Days ¹	Difference from Prior Year	Percent Change from Prior Year
2003	129,216		
2004	124,246	(4,970)	-3.8%
2005	130,664	6,418	5.2%
2006	134,742	4,078	3.1%
Average			1.5%
Six-year Compound Growth Factor			1.0922
Projected 2012 Patient Days			147,159
Average Daily Census (PDays/365)			403
Target Occupancy Factor (>200 beds)			1.33
2012 Bed Need (ADC x 1.33)			536
Current Bed Inventory			531

Sources: CFVMC 2004-2007 Hospital License Renewal Applications and Highsmith-Rainey 2004 Hospital License Renewal Application. Acute care bed need methodology, SMFP.

Note 1: In 2004, Highsmith Rainey became an LTCH. Therefore, its days were excluded from the patient day total beginning in 2004.

III. Statement of Adverse Effects

Without the requested adjustment to bed need, future residents of Cumberland County associated with the BRAC will have limited access to health services. These citizens will be forced to delay or forgo health services, and/or seek acute care services outside of Cumberland County. While many hospital services can be expanded by extending hours, acute care beds are not flexible and an insufficient inventory will have a direct, negative impact on health care accessibility, efficiency and quality in Cumberland County.

IV. Alternatives Considered

Three alternatives were considered and determined not to be feasible prior to submitting to this petition:

- Status Quo
- Postpone including incremental beds in the SMFP to a future year, and
- Request a change in the need methodology.

Status Quo

The first alternative, to maintain the status quo, and absorb the impact of the increased demand for services by existing health care providers, is not feasible because both CFVMC and Womack have capacity constraints. A decision to do nothing would, in fact, force some citizens to postpone, forgo and/or seek acute care services outside of the service area. The ultimate result would be to reduce the availability, accessibility and quality of health care services for Cumberland County residents.

Postpone Including Incremental Beds in the SMFP

The second alternative considered was to postpone including the incremental beds to support the BRAC to a future year. This alternative is not feasible due to the lead time required to build and open new acute care beds. The population surge will be fully realized by 2011 and the SMFP projects bed need for the year 2012. Further, should CFVMC be awarded the CON to build/open the beds, it would be substantially more cost effective to include the additional beds in its current construction project. By adding additional floors to the existing project, costs associated with the beds will be minimized.

Request a Change in the Need Methodology

The third alternative considered by the Petitioner was to request a change in the need methodology. However, based on discussions with the Division of Health Service Regulation

staff, the unique situation of the BRAC is not easily addressed through changes in need methodology, but more appropriately through an adjustment to need petition.

IV. No Duplication of Existing Services

Since the proposed adjustment of 20 acute care beds in Cumberland County is intended to serve the unique, incremental population resulting from the BRAC, the population will not be included in historical statewide patient day trends used to determine the acute care bed need in the proposed SMFP.

As previously noted, the two area hospitals that would be expected to provide acute care services to this population, Womack and CFVMC, currently operate at capacity. While additional beds are under construction at CFVMC, the beds will only serve to alleviate current capacity constraints and will be insufficient to accommodate the additional patients anticipated from the rapid increase in population associated with the BRAC.

V. Summary

CFVMC requests that the acute care bed need for 2012 for Cumberland County, proposed in Chapter 5 of the SMFP, be adjusted from 0 to 20 beds to support the unique population surge that is anticipated with the BRAC.

CFVMC is proud to provide services to a growing population that serves a unique role to the United States of America and the world. The expected growth is not speculative – it is based on legislated base realignments that must occur by law by 2011. The Petitioner asks that you consider our unique circumstances and assist in continuing to meet the health care needs of this important population.

Attachments (2)



Published on Friday, July 27, 2007

Bragg in line for \$37 million

By Henry Cuningham
Military editor

The U.S. House is expected to vote next week on a bill that would give Fort Bragg more than \$37 million to prepare for adding troops at the post.

The House Appropriations Committee voted Wednesday to include the money in the 2008 Defense Appropriations bill.

Fort Bragg will add about 12,000 soldiers, contractors and government employees in coming years due to a variety of initiatives, Col. David Fox, Fort Bragg's garrison commander, said Thursday during a meeting of the BRAC Regional Task Force.

The troops are coming because of base realignment, Army growth and reorganization, and the return of U.S. forces from European bases to the United States.

"I am pleased to announce this important funding for Global Rebasing Funding," said Rep. Robin Hayes, a Concord Republican and member of the House Armed Services Committee.

"Making sure our service members are adequately taken care of during this transition period for the rebasing and realignment of our nation's armed forces is vital."

The committee proposed adding more than \$1.25 billion to the Army's budget for upkeep and restoration of infrastructure.

The money will go to fix barracks and child-care facilities and to enhance community services through the United States, Europe and South Korea.

The changes at Fort Bragg could result in 35,000 to 45,000 people, including family members, coming to Fort Bragg and surrounding communities, Fox said. That's an increase from earlier estimates of the community growth under just the BRAC initiatives.

Under the bill, Fort Bragg would receive money for:

- Right-Size Community Services: \$584,000. This funding would go to enhance programs such as child-care services, family counseling, youth centers and youth sports programs.
- Facility Sustainment, Restoration, and Modernization: \$33.9 million. The funding is used for upkeep and maintenance on the Army post, including projects such as fixing leaks, broken windows, keeping heat and air-conditioning systems running, doing road improvements and other projects.
- Funding for Army Community Services Mobilization and Deployment Support: \$708,000. The program provides active-duty, Reserve and National Guard units with pre- and post-deployment/mobilization briefings, Family Readiness Group assistance, information and referral services, resource materials, and also Operation R.E.A.D.Y. (Resources for Education About Deployment and Youth) training. Training modules provide practical instruction on readiness. Materials are designed to support unit commanders in preparing service members, civilian employees and their families for military operations.
- Family Readiness Support Assistance for U.S. Army Special Operations Command: \$2.17 million. The funding will provide administrative assistance specifically in support of USASOC's family readiness programs and activities.

Military editor Henry Cuningham can be reached at cuninghamh@fayobserver.com or 486-3585.



DEPARTMENT OF THE ARMY
WOMACK ARMY MEDICAL CENTER
FORT BRAGG, NORTH CAROLINA 28310-5000

REPLY TO
ATTENTION OF

July 27, 2007

Office of the Commander

North Carolina State Health Coordinating Council
Medical Facilities Planning Section
Division of Facility Services
2714 Mail Service Center
Raleigh, NC 27699

Subject: BRAC Population Growth and Medical Services

Dear Council Members:

I am writing in my capacity as Commander of Womack Army Medical Center, Fort Bragg's on-base hospital. Womack Army Medical Center ("Womack") provides healthcare services to over 180,000 TriCare beneficiaries including active duty service members, military dependents and retirees.

The Base Realignment and Closure (BRAC) most recently approved by the President mandates the relocation of a number of units to Fort Bragg, including two large headquarters units: U.S. Army Forces Command, a four-star headquarters, and the US Army Reserve Command, a three-star headquarters. The realignment will have significant impact on health care services in the area, requiring enhanced medical treatment capabilities in the military and civilian systems. It is likely that BRAC will produce a net population growth of over 15,000 Soldiers, civilian personnel, and dependents.

Womack provides a variety of services, including cardiology, hematology/ oncology, family medicine, obstetrics, gynecology, psychiatric, orthopedic, pulmonary, vascular, pediatrics, neonatology, and surgical services, among others, to TriCare beneficiaries. However, our 165-bed facility has limited capacity; we have had to limit the number of TriCare patients we serve even without BRAC. The U.S. Army has no current plans to expand our capacity.

I understand that regional or community hospitals in our area will be impacted by the significant growth in patient population. The Womack Health Care system routinely refers and transfers people to these facilities when clinically necessary. We greatly appreciate what they do to help our fine service members and beneficiaries. To the extent that civilian health care systems in the area seek approval from the State Health Coordinating Council to meet the demands of BRAC growth, Womack fully supports their efforts.

Sincerely,

Terry J. Walters
Terry J. Walters
Colonel, U.S. Army
Commander

Raleigh PH
8-1-07
Acute Care

**Presentation to the North Carolina State Health Coordinating Council Regarding The
Petition for Adjustment to Need Determination for Acute Care Beds in Cumberland
County Associated With BRAC Population Changes**

DFS HEALTH PLANNING
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AUG 01 2007

Medical Facilities
PLANNING SECTION

Members of the Council, Ladies and Gentlemen.

My name is Dr. Eugene Wright and I am the Vice President and Medical Director for Primary Care and Specialty Network at Cape Fear Valley Health System in Fayetteville, NC. I am here today, on behalf of Cape Fear Valley Health System, to submit an adjustment to need petition for 20 additional acute care beds to support our medical community's unique needs resulting from the Base Realignment And Closure (otherwise known as BRAC), which became law November 8, 2005. As a result of the BRAC, Cumberland County is expected to grow by almost 23,000 people in the next four years, in addition to its normal population growth. The bed need methodology in the State Medical Facilities Plan does not accommodate unusual population growth such as this since it is based on historical state-wide patient day growth rates. We are not requesting a modification to the methodology, but we are requesting an adjustment to the need for BRAC population growth.

The realignment includes the relocation of two large headquarters to Fort Bragg - Forces Command, a four-star headquarters, and the US Army Reserve Command. The BRAC impact is anticipated to be so significant that 11 area counties came together last year to form the BRAC Regional Task Force. The Task Force has received a \$6 million grant which it is using to develop a growth management plan, train dislocated workers and assist in transforming the workforce in the area. The plan will address 11 specific need areas, including local and regional health care needs. Although the geographic area impacted by BRAC will span multiple counties, the scope of our petition is limited to Cumberland County.

The Center for Urban and Regional Studies at the University of North Carolina at Chapel Hill issued a Preliminary Community Impact Assessment on May 17, 2007. The study estimates the direct population increases in Cumberland County for military and civilian personnel and their family members to be over 11,000 by 2011. When indirect population increases for such factors as increased jobs that provide services to the new personnel are considered, the impact by 2011 is almost 23,000 for Cumberland County.

The impact of the BRAC population growth on acute care need in Cumberland County is estimated to be 20 beds. The method for developing this estimate is detailed in our petition. Briefly, the bed need was calculated using the projected census generated by the non-military 2012 BRAC population and the Cumberland County 2006 patient day use-rate. In order to be conservative, the total projected bed need was reduced in anticipation of out-migration to other counties and military facilities.

It is important to note we are the only acute care provider in Cumberland County, and we are currently operating at capacity. As of June 30, we are running at over 96 percent occupancy, which is triggering back-logs of patients in our emergency department who are waiting for beds. Even when the additional beds that are under construction or in the 2007 State Medical Facilities Plan are considered, our current census alone would result in an occupancy rate of over 72 percent.

Additionally, Womack, Fort Bragg's 165-bed on-base hospital, is running at capacity. According to Womack's commander, the hospital does not plan to expand to accommodate the BRAC growth.

It is clear that, without the requested adjustment to bed need, future residents of Cumberland County associated with the BRAC will have limited access to health services. These citizens will be forced to delay or forgo health services, and/or seek acute care services outside of Cumberland County. While many hospital services can be expanded by extending hours, acute care beds are not flexible, and an insufficient inventory will have a direct, negative impact on health care accessibility, efficiency and quality in Cumberland County.

In closing, I would like to leave you with the following messages:

- Cape Fear Valley Health System is proud to provide services to a growing population that serves a unique role to the United States of America and the world.
- The expected growth is not speculative – it is based on legislated base realignments that must occur by law by 2011.
- In order to support this population surge, we are petitioning a 20-bed adjustment to the need determination in the proposed 2008 State Medical Facilities Plan.
- We ask that you consider our unique circumstances and assist us in continuing to meet the health care needs of this diverse population.

Larry Miller, with Cape Fear Valley, and Kathy Barger, with Kennedy Covington, are here with me today. We will be happy to address any questions that you may have.